



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 9-2940-00030/02001  
06/22/2010**

**Facility Identification Data**

Name: METAULLICS SYSTEMS DIVISION OF PYROTEK INC  
Address: 2040 CORY RD  
SANBORN, NY 14132-9633

**Owner/Firm**

Name: PYROTEK INC  
Address: 9503 EAST MONTGOMERY AVE  
SPOKANE, WA 99206, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

Division of Environmental Permits:  
Name: DOUGLAS E BORSCHEL  
Address: 270 MICHIGAN AVE  
BUFFALO, NY 14203-2999  
Phone:7168517165

Division of Air Resources:  
Name: JACQUELINE DIPRONIO  
Address: NYSDEC  
270 MICHIGAN AVE  
BUFFALO, NY 14203-2915

Air Permitting Facility Owner Contact:  
Name: KEVIN SCOTT  
Address: METAULLICS SYSTEMS DIV OF PYROTEK INC  
2040 CORY RD  
SANBORN, NY 14132  
Phone:7167313221

**Permit Description  
Introduction**

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

**Summary Description of Proposed Project**

This application represents the construction of a new building to allow for the installation of a potential eighteen electrically heated graphitizing furnaces along with other material handling and processing equipment. Only twelve furnaces will be initially installed as part of the proposed projects. The remaining six will be installed to meet product demand and if additional hydro power to operate can be obtained. As a result of the expansion emissions of carbon monoxide will exceed 100 tons per year.

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

**Attainment Status**

METAULLICS SYSTEMS DIVISION OF PYROTEK INC is located in the town of WHEATFIELD in the county of NIAGARA.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	MARGINAL NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

\* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

\*\* NOx has a separate ambient air quality standard in addition to being an ozone precursor.

**Facility Description:**

Metaullics is an existing industrial plant that manufactures graphite, carbon and ceramic products for industrial applications. Typical products are graphite tubes and rods used in aluminum and chemical industry. Ceramic components used in high temperature industrial applications and bonded particle filters used to purify aluminum are also produced at the facility.

**Permit Structure and Description of Operations**

The Title V permit for METAULLICS SYSTEMS DIVISION OF PYROTEK INC is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.



**New York State Department of Environmental Conservation**  
**Permit Review Report**

**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

METALLICS SYSTEMS DIVISION OF PYROTEK INC is defined by the following emission unit(s):

Emission unit 000001 - This emission unit consists of five existing and 18 proposed electrically heated furnaces used to graphitize various carbonaceous materials. The existing five furnaces are located in bldg #5 and exhaust through existing emission points 001-4 and 1-5. The proposed new furnaces (18) will be installed in new graphitizing bldgs #6 and #7 and will exhaust to emission points 0003-1, 3-2, 3-3, 3-4, 3-5, and 3-6. Dust collector emissions from proposed graphite handling system to be located in bldg #6 will be directed to EP 003-7.

Emission unit 000001 is associated with the following emission points (EP):

001-4, 001-5, 003-1, 003-2, 003-3, 003-4, 003-5, 003-6, 003-7

Process: 0D1 is located at Building 5 - Five existing graphitizing furnaces. Material (i.e. graphite/carbon tubes/rods & graphite powders) to be graphitized are placed in graphite capsules. These capsules are slowly pushed by mechanical means through the graphitizing furnace where the material is exposed to high temperature for a period of time graphitizing the material. Emissions from the process are collected via a hood and ductwork and vented to atmosphere through emission points 001-4 and 001-5. The furnaces discharge through one emission point at a time to allow for maintenance on the stack that is not in operation.

Process: 0D2 is located at Building 6 - Dust collector emissions from a proposed graphite pack handling system (i.e. screening and material handling) to be located in bldg #6. The dust collector will discharge to atmosphere through proposed emission point 003-7. Pack material used in the proposed graphitizing expansion furnaces will be processed for re-use.

Process: 0D3 is located at Building 7 - Eighteen proposed electrically heated furnaces will be used to graphitize various carbonaceous materials in a nitrogen atmosphere. Emissions from the process are to be collected via a hood and ductwork and vented to atmosphere through a fan and stack arrangement. These furnaces are to be located in buildings six and seven.

Process: 0D4 is located at Building 7 - Six proposed graphitizing furnaces to be located in building 7. Furnaces 18 thru 20 will exhaust to emission point 003-5. Furnaces #21 thru 23 will exhaust thru emission point 21 thru 23.

Emission unit 000002 - Twelve (12) electrically heated and three (3) natural gas fired furnaces used to bake various carbonaceous materials. All fifteen existing furnaces are located in bldg #5 and exhaust through a natural gas fired incinerator and to emission point 001-3. Emission point 1-7 is the exhaust stack from a bag house dust collector used to control emissions from a pack sand screening/storage/handling process. The pack sand is used to pack product in the baking furnaces. When the baking process is complete, the sand is removed, screened and placed back into a storage tank ready for re-use.

Emission unit 000002 is associated with the following emission points (EP):

001-3, 001-7

Process: 0P1 is located at Building 5 - A total of (15) fifteen (12 electrically heated & 3 natural gas fired)



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 9-2940-00030/02001  
06/22/2010**

furnaces are used to bake various carbonaceous materials consisting of small diameter tubes and rods of various lengths. The tubes and rods are placed in a furnace utilizing a packing sand & sager system. Once the furnace is loaded, the furnace is energized or fired in order to bake the product. Exhaust gases generated from this baking process are collected via a ductwork collection system and discharged to atmosphere via emission point 001-3 after 1st passing thru a natural gas incinerator. After the baking process is completed, the furnace is allowed to cool naturally and product is then removed along with the packing sand.

Process: OP2 is located at Building 5 - The packing sand is then screened and conveyed to a storage tank ready for re-use in the next baking cycle. A bag house dust collector is used to control emissions from this pack sand handling system. The bag house dust collector discharges to atmosphere via emission point 001-7.

Process: OPP is located at Building 5 - A prototype baghouse emission control system to control fumes from the baking furnaces. In this system carbon/graphite dust would be injected via a metering valve into the exhaust from the carbon baking furnaces. The carbon/graphite dust would combine with the pitch 'fumes' in the exhaust creating a larger carbon/graphite particle which would be then captured by the baghouse. Collected material would be re-utilized in the manufacturing process so as to eliminate waste for off-site disposal. The existing incinerator control system will remain in place and operational in the event of a prototype system malfunction.

Emission unit 000003 - Carbon/graphite stock impregnation, re-baking, along with a mechanical cleaning operation are located in the impregnation department in building #5. Emissions are vented to atmosphere through (3) three emission points: EP 002-6-bag house dust collector for mechanical cleaning of exterior surfaces of product; EP 002-5-roof mounted fan for ventilation of impregnation department; EP 02-3, a natural gas fired incinerator used to control emissions from the re-baking process.

Emission unit 000003 is associated with the following emission points (EP):  
002-3, 002-5, 002-6

Process: OP3 is located at Building 5 - Mechanical cleaning of exterior surfaces of small diameter carbon/graphite tubes. Emissions from two machines are collected by a baghouse vented to emission point 002-6.

Process: OP4 is located at Building 5 - Impregnation: Typically baskets containing small diameter graphite/carbon tubes or rods are loaded into a vertical autoclave using an overhead monorail hoist. Heated petroleum pitch or a resin is introduced into the autoclave via vacuum. The autoclave is then pressurized with nitrogen gas for a period of time. When the process is complete, the autoclave is opened releasing pitch or resin in vapor form to the surrounding area within the building. The pitch and resin vapors are vented to atmosphere via emission point 2-5 which is a roof mounted building fan.

Process: OP5 is located at Building 5 - Rebake: Carbon and graphite tubes or rods are loaded via an overhead monorail hoist into an electrically heated furnace. The furnace is then energized to complete the pre-heating and/or rebaking processes. Emissions from re-bake furnaces #20 and #21 and pre-heater/re-bake furnaces #1 and #2 are collected via ductwork system and vented to atmosphere through emission point 2-3 after 1st passing through a natural gas fired incinerator.

Process: OPH is located at Building 5 - Pre-heat furnace used to heat furan resin impregnated stock.



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 9-2940-00030/02001  
06/22/2010

Emission unit 000004 - Existing carbon/graphite stock mixing/extrusion and machining operations located building #5. Emissions are vented to a fabric filter dust collector and thru emission point 001-6.

Emission unit 000004 is associated with the following emission points (EP):  
001-6

Process: 0P6 is located at Building 5 - Typically various carbonaceous materials along with pitch are placed in one of two 100 pound small steam heated mixer. After mixing, the mix is air cooled using a small cooler/mixer. The cooled mixed is then extruded into small diameter tubes and rods using a hydraulically operated steam heated extrusion press. The emissions from the mixing, cooling and extrusion operations are collected using a hood and duct work system. These emissions along with the emissions from an adjacent carbon/graphite machining operation are then vented through a baghouse, emission point 001-6.

Process: P6A is located at Building 5 - Emissions from carbon/graphite machining operation are vented to atmosphere through emission point 001-6 after 1st passing through a bag house dust collector. The machining consists of various lathes, band saws, drills & mills and uses a hood ductwork work system to control emissions from the operation.

Emission unit 000005 - Existing graphite loading & unloading system in building #5, two (2) proposed graphite loading & unloading systems in building #8, and a graphite *Stabilization* operation also located in building #8 Emissions from this emission unit are vented to atmosphere through (4) four emission points as follows: EP 002-7, bag house dust collector for the existing graphite loading & unloading system in building 5, EP 003-8 condenser emissions from proposed graphite stabilization operation located in building 8; EP 003-9 baghouse dust collector for a proposed graphite loading system in building 8, and EP 03-10 baghouse dust collector for a proposed graphite loading system in building 8 (system #2).

Emission unit 000005 is associated with the following emission points (EP):  
002-7, 003-8, 003-9, 03-10

Process: 0P7 is located at Building 8 - Graphite *Stabilization* is a proposed operation in which graphitized powder is introduced into a system in a nitrogen atmosphere in which heat is added electrically. This operation will be located in proposed building #8. Xylene emissions from this operation will be vented to atmosphere through emission point 003-8 after 1st passing through a water cooled condenser.

Process: 0P8 is located at Building 5 - Existing graphite capsule loading and unloading operation located in building 5 and vented to a baghouse emission point 002-7. Containers of graphite powders are loaded by mechanical means into capsules and then transported to the graphitizing furnace department. After graphitizing, the capsules are returned to capsule loading & unloading area where the capsules are emptied and the material loaded into containers for further processing.

Process: 0P9 is located at Building 8 - Emissions from the two (2) proposed graphite loading and unloading operations located in building 8 will be vented to atmosphere through emission points 3-9 and 3-10 after 1st passing a bag house dust collector. Emissions from each operation will be directed to a

**Title V/Major Source Status**

METALLICS SYSTEMS DIVISION OF PYROTEK INC is subject to Title V requirements. This determination is based on the following information:

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

As a result of the proposed expansion, carbon monoxide emissions will be emitted in excess of the major source threshold of 100 tons.

**Program Applicability**

The following chart summarizes the applicability of METAULLICS SYSTEMS DIVISION OF PYROTEK INC with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	NO
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	NO
SIP	YES

**NOTES:**

**PSD** Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

**NSR** New Source Review (6 NYCRR Part 231) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

**NESHAP** National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

**MACT** Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

**NSPS** New Source Performance Standards (40 CFR 60) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 9-2940-00030/02001  
06/22/2010**

apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

**Compliance Status**

Facility is in compliance with all requirements.

**SIC Codes**

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

**SIC Code**

**Description**

3624

CARBON AND GRAPHITE PRODUCTS

**SCC Codes**

SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information.Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

**SCC Code**

**Description**

3-85-001-20

COOLING TOWER  
COOLING TOWER - PROCESS COOLING  
MECHANICAL DRAFT

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

3-99-999-89	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES OTHER NOT CLASSIFIED
3-99-999-91	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES OTHER NOT CLASSIFIED
3-99-999-93	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES Other Not Classified

**Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant Name	PTE	Range
		lbs/yr	
000050-32-8	BENZO (A) PYRENE		> 0 but < 10 tpy
000191-24-2	BENZO [G, H, I] PERYLENE		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE		>= 100 tpy but < 250 tpy
000218-01-9	CHRYSENE		> 0 but < 10 tpy
000206-44-0	FLUORANTHENE		> 0 but < 10 tpy
000110-00-9	FURAN C4H4O		> 0 but < 2.5 tpy
0NY100-00-0	HAP		>= 10 tpy but < 25 tpy
000074-90-8	HYDROCYANIC ACID		> 0 but < 10 tpy
007783-06-4	HYDROGEN SULFIDE		>= 2.5 tpy but < 10 tpy
0NY075-00-0	PARTICULATES		>= 10 tpy but < 25 tpy
068334-31-6	PETROLEUM PITCH		>= 2.5 tpy but < 10 tpy
065996-93-2	PITCH, COAL TAR, HIGH-TEMP.		> 0 but < 2.5 tpy
000129-00-0	PYRENE		> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE		>= 10 tpy but < 25 tpy
0NY998-00-0	VOC		>= 2.5 tpy but < 10 tpy
001330-20-7	XYLENE, M, O & P MIXT.		> 0 but < 10 tpy

New York State Department of Environmental Conservation  
**Permit Review Report**



Permit ID: 9-2940-00030/02001  
06/22/2010

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A: Emergency Defense - 6 NYCRR 201-1.5**

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**Item B: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)**

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

**Item C: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.3(a)(4)**

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

**Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and**

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

**Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.5(a)(5)**

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

**Item H: Property Rights - 6 NYCRR 201-6.5(a)(6)**

This permit does not convey any property rights of any sort or any exclusive privilege.

**Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)**

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

**Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)**

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

**Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(i)**

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

**Item L: Permit Exclusion - ECL 19-0305**

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

**Item M: Federally Enforceable Requirements - 40 CFR 70.6(b)**

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

New York State Department of Environmental Conservation  
**Permit Review Report**



Permit ID: 9-2940-00030/02001  
 06/22/2010

**Item A: General Provisions for State Enforceable Permit Terms and Condition - 6  
 NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

**Regulatory Analysis**

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
FACILITY	ECL 19-0301	36	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 68	21	Chemical accident prevention provisions
FACILITY	40CFR 82-F	22	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	37	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	23, 28	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5 (a) (4)	15	General conditions
FACILITY	6NYCRR 201-6.5 (a) (7)	2	General conditions Fees
FACILITY	6NYCRR 201-6.5 (a) (8)	16	General conditions
FACILITY	6NYCRR 201-6.5 (c)	3	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 9-2940-00030/02001  
06/22/2010**

FACILITY	6NYCRR 201-6.5 (c) (2)	4	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (d) (5)	17	Compliance schedules
FACILITY	6NYCRR 201-6.5 (e)	24	Compliance Certification
FACILITY	6NYCRR 201-6.5 (f) (6)	18	Off Permit Changes
FACILITY	6NYCRR 202-1.1	19	Required emissions tests.
FACILITY	6NYCRR 202-2.1	6	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.2	38	General Prohibitions - air pollution prohibited.
FACILITY	6NYCRR 211.3	20	General Prohibitions - visible emissions limited
0-00005/-/0P7	6NYCRR 212.10 (c) (4) (i)	34	NOx and VOC RACT required at major facilities
0-00005/-/0P7	6NYCRR 212.11 (b) (4)	35	Sampling and monitoring
0-00002/-/0PP	6NYCRR 212.4 (a)	29	General Process Emission Sources - emissions from new sources and/or modifications
0-00002/001-3	6NYCRR 212.4 (a)	30, 31	General Process Emission Sources - emissions from new sources and/or modifications
0-00003/002-3	6NYCRR 212.4 (a)	32, 33	General Process Emission Sources - emissions from new sources and/or modifications
0-00003/-/0P4	6NYCRR 212.4 (b)	39	New processes
FACILITY	6NYCRR 212.4 (c)	26, 27	General Process Emission Sources - emissions from new processes and/or modifications
FACILITY	6NYCRR 212.6 (a)	25	General Process Emission Sources - opacity of emissions limited
FACILITY	6NYCRR 215	8	Open Fires
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions

**Applicability Discussion:**

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-0301

This section of the Environmental Conservation Law establishes the powers and duties assigned to the



**New York State Department of Environmental Conservation**  
**Permit Review Report**

**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.5 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide



**New York State Department of Environmental Conservation**  
**Permit Review Report**

**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.5 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.5 (a) (8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.5 (c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.5 (c) (2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.5 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.5 (d) (5)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.5 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.5 (f) (6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

6 NYCRR 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to



**New York State Department of Environmental Conservation**  
**Permit Review Report**

**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

be borne by the owner/operator of the source.

6 NYCRR 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENDar year.

6 NYCRR 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 211.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

6 NYCRR 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68

This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act AmENDments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

**Facility Specific Requirements**

In addition to Title V, METAULLICS SYSTEMS DIVISION OF PYROTEK INC has been determined to be subject to the following regulations:

6 NYCRR 212.10 (c) (4) (i)

VOC removal efficiency of the condenser associated with the graphite stabilization is expected to be 90%. Efficiency greater than 81% is considered RACT.



New York State Department of Environmental Conservation  
**Permit Review Report**

**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

6 NYCRR 212.11 (b) (4)

The outlet gas temperature must be monitored from the refrigerated condenser associated with the proposed graphite stabilization.

6 NYCRR 212.4 (a)

This rule requires compliance with the degree of control specified in Tables 2, 3 and 4 for new (after July 1, 1973) process emission sources. Process sources which emit 'A' rated contaminants in excess of one pound per hour are required to apply emissions control equipment having a minimum efficiency of 99%.

6 NYCRR 212.4 (b)

For sources where the allowable emission rate is not shown in Table 2 of 6NYCRR, Part 212.9, the allowable rate will be determined by the Department. The 'A' rated contaminants emitted from the autoclave are less than 1#/hour, and no control required by Table 2. However if odors or emissions are noted, controls may be required.

6 NYCRR 212.4 (c)

This rule requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which Permissible Emission Rate is Based on Process Weight, to be limited to an particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

6 NYCRR 212.6 (a)

This rule specifies an opacity limitation of less than 20% for any six consecutive minute period for all process emission sources.

**Compliance Certification**

**Summary of monitoring activities at METAULLICS SYSTEMS DIVISION OF PYROTEK INC:**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Cond No.</b>	<b>Type of Monitoring</b>
-----		
---		
FACILITY	5	record keeping/maintenance procedures
FACILITY	24	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
0-00005/-/0P7	34	monitoring of process or control device parameters as surrogate
0-00005/-/0P7	35	monitoring of process or control device parameters

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-2940-00030/02001**  
**06/22/2010**

0-00002/-/0PP	29	as surrogate monitoring of process or control device parameters as surrogate
0-00002/001-3	30	intermittent emission testing
0-00002/001-3	31	monitoring of process or control device parameters as surrogate
0-00003/002-3	32	monitoring of process or control device parameters as surrogate
0-00003/002-3	33	monitoring of process or control device parameters as surrogate
0-00003/-/0P4	39	record keeping/maintenance procedures
FACILITY	26	monitoring of process or control device parameters as surrogate
FACILITY	27	monitoring of process or control device parameters as surrogate
FACILITY	25	record keeping/maintenance procedures

-----  
 ----

**Basis for Monitoring**

6NYCRR, Part 212.4(c) for the control of particulate emissions for process sources and dust collectors associated with handling, cleaning, and machining operations. Particulate emissions are not to exceed 0.05 gr/dscf from the associated emission points.

6NYCRR, Part 212.6(a) limits opacity from all process emission sources to less than 20 percent during any six consecutive minutes.

6NYCRR, Part 212.4(a) requires 99% control efficiency for emission sources which emit "A" rated, high toxicity contaminants in excess of 1 pound per hour. Those process emission sources are controlled by a fume incinerator and venting to emission points 001-3 and 002-3. A minimum operating temperature has been established at 1450 degrees F. and a stack test will verify the destruction efficiency.

6NYCRR, Part 212.10(c)(4) establishes RACT(Reasonably Available Control Technology) for major sources of volatile organic compounds greater than 50 tons per year and requires xylene emissions from the stabilization process to be controlled to a minimum 81% . The design efficiency of the condenser is established at 90% and will be operated at temperatures established in the permit to maintain this efficiency.